



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,709	01/12/2001	David Bernard Fischer	P04814US0 PHI 1314	2738

27142 7590 02/12/2002
MCKEE, VOORHEES & SEASE, P.L.C.
ATTN: PIONEER HI-BRED
801 GRAND AVENUE, SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 02/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,709

Applicant(s)

Fischer et al

Examiner

FOX

Group Art Unit

1638

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE -3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-32 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-32 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 1638

Claims 1, 5 and 7 are objected to for their inclusion of blanks "_____". It is understood that the blanks will be replaced with deposit accession numbers.

Applicants' statement on page 50 of the specification regarding their intent to deposit the claimed maize hybrid seed in compliance with 37 CFR 1.801-1.809 is acknowledged.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 8, 10-12, 14-16, 18, 19, 21, 23-25, 27-29 and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite in its recitation of "the...protoplasts" which lacks antecedent basis in claim 5 on which it depends. The following amendment would obviate this rejection:

In claim 6, line 1, delete "the" before "cells" and insert --of the tissue culture-- after "protoplasts".

Claims 8 and 21 are indefinite in their recitation of "[t]he maize plant of claim 2 [or 20] wherein said plant is male sterile", which is confusing, since the plant of claim 2 or claim 20 is male fertile. The following amendments would obviate this rejection:

In claims 8 and 21, replace "wherein said plant is male sterile" with -- , further comprising a genetic factor conferring male sterility--.

Art Unit: 1638

Claims 10, 14, 18, 23, 27 and 31 are indefinite in their recitation of "[t]he maize plant breeding program of claim 9 [or 13 or 17 or 22 or 26 or 30]" which is confusing, since the preceding claims are drawn to methods rather than breeding programs. The following amendments would obviate this rejection:

In claims 10, 14, 18, 23, 27 and 31, line 1, replace "maize plant breeding program" with -- method--.

Claims 12, 16, 25 and 29 are indefinite in their recitation of "hybrid maize plant according to claim 2 [or 20] which lacks antecedent basis in the claims from which they depend. Deletion of "hybrid" before "maize" in line 1 of claims 12, 16, 25 and 29 would obviate this rejection.

Claims 11, 15, 19, 24, 28 and 32 are indefinite in their recitation of "excellent", "good", and "suited", which are unduly narrative and imprecise and do not clearly specify the degree of expression of the claimed trait, and so do not clearly characterize the claimed maize plant.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1638

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11, 15, 19, 24, 28 and 32 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson (U.S. 6,046,387 filed January 1999).

The claims are drawn to a maize plant exhibiting at least two traits which are exhibited by hybrid 36N70 such as excellent yield potential and suited to the Northcentral United States, wherein said maize plant has at least one ancestor which is 36N70, wherein neither the number of generations of crossing nor the identity of the other parents in each cross are specified.

Johnson teaches a maize plant developed in Iowa with excellent yield potential and suited to the Northcentral region of the United States (see, e.g., column 11). The maize plant taught by the reference differs from the claimed maize plant only in its derivation by a method in which 36N70 was a parent in a single cross. However, the process of producing the claimed maize plant

Art Unit: 1638

would not distinguish it from the prior art maize plant, particularly in view of the loss of 36N70-derived genetic material with each outcross to a non-36N70 parent and with each generation of such crossing, and given the failure of the claimed individual traits to be unique to 36N70. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson 6,046,387 (filed January 1999).

The claims are drawn to a hybrid maize plant exhibiting all of the characteristics of 36N70, and methods for breeding and propagating it.

Johnson teaches a hybrid Dent maize plant with dark green leaves, pink anthers, green glumes, light green silk, and yellow endosperm (see, e.g., column 32), wherein the plant was derived by crossing other breeding lines exhibiting desirable traits, and wherein tissue culture or genetic engineering could be used to propagate and further improve the hybrid, respectively (see, e.g., column 13, line 52 through column 31).

Johnson does not teach a hybrid maize plant with dark anthocyanin-pigmented brace roots, absent sheath pubescence, upright ear, slightly curved rows, or red cobs.

It would have been obvious to one of ordinary skill in the art to utilize the hybrid maize plant taught by the reference, and to modify that plant by crossing with other breeding lines to incorporate other desirable agronomic traits, as suggested by the reference.

Application/Control Number: 09/759,709

Page 6

Art Unit: 1638

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

February 10, 2002

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180/1638

A handwritten signature in cursive script, appearing to read "David T. Fox", is written over the typed name and title.